Listing of Claims:

1. (Previously Presented) A method for setting a delivery order attribute (DOA) as a parameter for transmission of data packets in a packet data network (GPRS-NW), said method comprising:

establishing mapping information for delivery order attributes corresponding to different transmission protocol types;

detecting a transmission protocol type for the transmission of data packets;

deciding whether said detected protocol type is a predetermined type; and

setting, based on said mapping information and said decision result, the delivery order attribute (DOA) if the predetermined protocol type is not present.

2. (Previously Presented) The method of claim 1, wherein said set delivery order attribute (DOA) indicates that the order of transmitted data packets is to be maintained.

3. (Previously Presented) The method of claim 1, wherein said delivery order attribute (DOA) is not set if the predetermined protocol type is present.

4. (Previously Presented) The method of claim 3, wherein an unset delivery order attribute indicates that the order of transmitted data packets does not need to be maintained.

5. (Previously Presented) The method of claim 1, wherein said predetermined protocol type ~~is~~ comprises a protocol type used for real-time transmission.

6. (Previously Presented) The method of claim 1, wherein said transmission protocol type is derived from PDP context information or PDP type information.

7. (Currently Amended) A method for transmission of data packets in a packet data network, said method comprising:

detecting at least a delivery order attribute (DOA) as a parameter set for a transmission protocol type used for transmission of data packets;

deciding whether said delivery order attribute parameter is set for said protocol type; and

determining a traffic class of the transmitted data packets, and processing the transmitted data packets dependent on the determined traffic class if the delivery order parameter is set.

8. (Previously Presented) The method according to claim 7, wherein if said delivery order attribute is set, then the order of transmitted data packets is to be maintained.

9. (Previously Presented) The method of claim 7, wherein if said delivery order attribute is not set, then the order of transmitted data packets does not need to be maintained.

10. (Previously Presented) The method according to claim 9, wherein data packets to be transmitted are forwarded to their destination immediately and irrespective of the traffic class.

11. (Currently Amended) The method of claim 7, further comprising:

deciding whether a determined traffic class is a predetermined traffic class; and

if the traffic class is a predetermined traffic class, discarding received data packets which are received after subsequently sent data packets.

12. (Currently Amended) The method according to claim 7, further comprising:

deciding whether a determined traffic class is a predetermined traffic class; and

if the determined traffic class is not a predetermined traffic class, monitoring a sequential relationship among received data packets, detecting whether a data packet is missing in the monitored sequence, and in response to the detection of a missing data packet, buffering received data packets.

13. (Previously Presented) The method of claim 12, further comprising:

setting a buffering time window, during which time window received data packets are buffered.

14. (Previously Presented) The method of claim 13, further comprising:

checking to determine whether the missing data packet is received during the buffering time window.

15. (Previously Presented) The method of claim 14, wherein if said missing data packet is not received during the buffering time window, said buffered data packets are forwarded irrespective of the missing data packet, which is discarded even if received after the buffering time window.

16. (Previously Presented) The method of claim 14, wherein if said missing data packet is not received during the buffering time window, said buffered data packets are forwarded irrespective of the missing data packet, which is delivered out of sequence even if received after the buffering time window.

17. (Previously Presented) The method of claim 14, wherein if said missing data packet is received during the buffering time window, said buffered data packets are reordered to their initial sequence order and forwarded in their initial sequence order.

18. (Previously Presented) The method of claim 17, wherein said reordering is based on sequence numbers of the packets contained in headers of the packets.

19. (Previously Presented) The method of claim 18, wherein said headers comprise GTP headers, RLC headers, LLC headers or SNDCP headers of the packets; wherein GTP = GPRS (General Packet Radio Service) Tunneling Protocol, RLC = Radio Link Control, LLC = Logical Link Control and SNDCP = Subnetwork Dependent Convergence Protocol.

20. (Currently Amended) A network element for controlling transmission of data packets in a packet data network, said network element comprising:

first detecting means configured to detect at least a delivery order attribute (DOA) as a parameter set for a transmission protocol type used for transmission of data packets;

first deciding means configured to decide whether said delivery order

attribute parameter is set for said protocol type;

first determining means responsive to a positive decision result and configured to determine a traffic class of the transmitted data packets; and

processing means configured to process the transmitted data packets dependent on the determined traffic class.

21. (Previously Presented) The network element of claim 20, wherein said processing means further comprises:

second deciding means configured to decide whether a determined traffic class is a predetermined traffic class; and

discarding means responsive to a positive result of said second deciding means and configured to discard received data packets which are received after subsequently sent data packets.

22. (Previously Presented) The network element of claim 20, wherein said processing means further comprises:

second deciding means configured to decide whether a determined traffic class is a predetermined traffic class; and

monitoring means responsive to a negative result of said deciding means and configured to monitor a sequential relationship among received data packets;

second detecting means configured to detect whether a data packet is missing in the monitored sequence; and

buffer means responsive to the detection of a missing data packet and configured to buffer received data packets.

23. (Previously Presented) The network element of claim 22, wherein said processing means further comprises:

setting means configured to set a buffering time window, during which time window received data packets are buffered.

24. (Previously Presented) The network element of claim 23, wherein said processing means further comprises:

checking means configured to check whether the missing data packet is received during the buffering time window.

25. (Previously Presented) The network element of claim 24, wherein said processing means further comprises:

forwarding means configured to forward, if said missing data packet is not received during the buffering time window, said buffered data packets irrespective of the missing data packet, and to discard the missing data packet even if received after the buffering time window.

26. (Previously Presented) The network element of claim 24, wherein said processing means further comprises:

reordering means configured to reorder, if said missing data packet is received during the buffering time window, said buffered data packets to their initial sequence order, and to forward the buffered data packets in their initial sequence order.

27. (Previously Presented) The network element of claim 20, wherein said network element comprises a radio network controller (RNC) controlling the transmission of data packets in the packet data network in a downlink direction.

28. (Previously Presented) The network element of claim 20, wherein said network element comprises a GGSN (Gateway General Packet Radio Service (GPRS) Support Node) controlling the transmission of data packets in the packet data network in an uplink direction.

29. (Previously Presented) The method of claim 8, further comprising:

deciding whether a determined traffic class is a predetermined traffic class; and

if the traffic class is a predetermined traffic class discarding received data packets which are received after subsequently sent data packets.

30. (Previously Presented) The method according to claim 7, further comprising:

deciding whether a determined traffic class is a predetermined traffic class; and

if the determined traffic class is not a predetermined traffic class monitoring a sequential relationship among received data packets, detecting whether a data packet is missing in the monitored sequence, and in response to the detection of a missing data packet, buffering received data packets.

31. (Previously Presented) The method of claim 30, further comprising:

setting a buffering time window, during which time window received data packets are buffered.

32. (Previously Presented) The network element of claim 21, wherein said network element comprises a radio network controller (RNC) controlling the transmission of data packets in the packet data network in a downlink direction.

33. (Previously Presented) The network element of claim 22, wherein said network element comprises a radio network controller (RNC) controlling the transmission of data packets in the packet data network in a downlink direction.

34. (Previously Presented) The network element of claim 23, wherein said network element comprises a radio network controller (RNC) controlling the transmission of data packets in the packet data network in a downlink direction.

35. (Previously Presented) The network element of claim 24, wherein said network element comprises a radio network controller (RNC) controlling the transmission of data packets in the packet data network in a downlink direction.

36. (Previously Presented) The network element of claim 25, wherein said network element comprises a radio network controller (RNC) controlling the transmission of data packets in the packet data network in a downlink direction.

37. (Previously Presented) The network element of claim 26, wherein said network element comprises a radio network controller (RNC) controlling the transmission of data packets in the packet data network in a downlink direction.

38. (Previously Presented) The network element of claim 21, wherein said network element comprises a GGSN (Gateway General Packet Radio Service (GPRS) Support Node) controlling the transmission of data packets in the packet data network in an uplink direction.

39. (Previously Presented) The network element of claim 22, wherein said network element comprises a GGSN (Gateway General Packet Radio Service (GPRS) Support Node) controlling the transmission of data packets in the packet data network in an uplink direction.

40. (Previously Presented) The network element of claim 23, wherein said network element comprises a GGSN (Gateway General Packet Radio Service (GPRS) Support Node) controlling the transmission of data packets in the packet data network in an uplink direction.

41. (Previously Presented) The network element of claim 24, wherein said network element comprises a GGSN (Gateway General Packet Radio Service (GPRS) Support Node) controlling the transmission of data packets in the packet data network in an uplink direction.

42. (Previously Presented) The network element of claim 25, wherein said network element comprises a GGSN (Gateway General Packet Radio Service (GPRS) Support Node) controlling the transmission of data packets in the packet data network in an uplink direction.

43. (Previously Presented) The network element of claim 26, wherein said network element comprises a GGSN (Gateway General Packet Radio Service (GPRS) Support Node) controlling the transmission of data packets in the packet data network in an uplink direction.